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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,918	11/06/2001	Takehiro Ikeda	3815/137	5471

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EXAMINER

PHAN, HUY Q

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,918

Applicant(s)

IKEDA ET AL.

Examiner

Huy Q Phan

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14 and 15 (both are dependent claims of claim 8) recite the limitation "said selecting means" in - - line 2 of each claims - -. There is insufficient antecedent basis for this limitation in the claim.

For examining purpose, the Examiner assumes that "said selecting means" has been changed to - - selecting step - -.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 8, 9 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Cashman (US-6,449,494).

Regarding claim 1, Cashman discloses a paging control method of a communication system that selectively provides one of communication services

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implemented by integrating a plurality of communication systems (col. 9, lines 45-46),
the paging control method comprising:

a first step of transmitting a paging signal (col. 9, lines 31-42 and col. 8, lines 22-31) from each of the plurality of communication systems (col. 9, lines 45-46) to a terminal (col. 8, lines 10-30); and

a second step of receiving the plurality of paging signals by said terminal (col. 9, lines 31-42 and col. 8, lines 22-31), and of selecting a desired communication system for use by said terminal from said plurality of communication systems in accordance with information contained in the plurality of paging signal received (col. 7, lines 30-57).

Regarding claim 2, Cashman discloses a paging control method as recited in the rejection of claim 1, further comprising a third step of transmitting a connection request signal from said terminal to said desired communication system selected at the second step (col. 7, lines 52-57).

Regarding claim 8, Cashman discloses a paging control system of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems (col. 9, lines 45-46), the paging control system comprising:

communication control means (col. 10, lines 2-50 and col. 7, lines 25-31) for causing each of the plurality of communication systems (col. 9, lines 45-46) to transmit

a paging signal (col. 7, lines 31-42 and col. 8, lines 22-31) via an external network (col. 3, lines 15-32); and

a terminal for receiving the plurality of paging signals (col. 9, lines 31-42 and col. 8, lines 22-31), and for selecting a desired communication system for use from said plurality of communication systems in accordance with information contained in the plurality of paging signal received (col. 7, lines 30-57).

Regarding claim 9, Cashman discloses a paging control method as recited in the rejection of claim 8, wherein said terminal transmits a connection request signal to said desired communication system selected (col. 7, lines 52-57).

Regarding claim 15, Cashman discloses a paging control method as recited in the rejection of claim 8, wherein selecting step carries out the selection of said optimum communication system (col. 7, lines 48-57) in response to a query about the optimum communication system from said communication control means (col. 10; lines 8-50).

4. Claims 3-7 and 10-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Seazholtz et al. (US-5,920,821).

Regarding claim 3, Seazholtz et al. disclose in figure 1, a paging control method of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and

16), and includes a paging agent (col. 27, line 64) for managing paging signals (col. 27, lines 41-56), the paging control method comprising:

a first step of transmitting previously a request for a communication system a terminal wishes to use (col. 9, lines 24-39), and terminal location information of the terminal from the terminal to the paging agent (col. 33, lines 54-64), and of registering the received request and the terminal location information in the paging agent (col. 33, lines 44-54);

a second step of selecting an optimum communication system from among the plurality of communication systems by said paging agent in accordance with the registered request and the terminal location information in said paging agent (col. 18, lines 4-6 and col. 9, line 40-col. 10, line 14); and

a third step of transmitting the paging signal from said optimum communication system to said terminal (col. 9, lines 35-39).

Regarding claim 4, Seazholtz et al. disclose a paging control method as recited in the rejection of claim 3, further comprising a fourth step of transmitting a connection request signal from said terminal to said optimum communication system (col. 9, lines 55-56 and col. 9, lines 35-39).

Regarding claim 5, Seazholtz et al. disclose a paging control method of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and

16), and includes a paging agent (col. 27, line 64) for managing paging signals (col. 27, lines 41-56), said paging control method comprising:

a first step of transmitting previously a request for a communication system a terminal wishes to use (col. 9, lines 24-39), and terminal location information of the terminal from the terminal to the paging agent (col. 33, lines 54-64), and of registering the received request and the terminal location information in the paging agent (col. 33, lines 44-54);

a second step of selecting an optimum communication system from among the plurality of communication systems by said paging agent in accordance with the registered terminal location information in said paging agent (col. 9, line 40-col. 10, line 14); and

a third step of transmitting a paging signal including a name (System Identification number SID) of said communication system selected at the second step from a given communication system predetermined from among said plurality of communication systems (col. 9, lines 29-50) to carry out transmission to said terminal (col. 9, lines 55-56).

Regarding claim 6, Seazholtz et al. disclose a paging control method as recited in the rejection of claim 5, further comprising a fourth step of transmitting a connection request signal from said terminal to said given communication system (col. 9, lines 55-56 and col. 9, lines 35-39), and of waiting for an information signal from said optimum communication system contained in said paging signal (col. 28, lines 6-32).

Regarding claim 7, Seazholtz et al. disclose a paging control method as claimed in any one of claim 3 and 5, wherein the second step uses one of a communication cost (fig. 5 and col. 34, lines 16-27), a transmission rate (very high bit transmission rate), a transmission quality (good error performance) and a combination of at least two of them (col. 26, lines 18-19 and col. 34, lines 16-27) as a selection index of said optimum communication system (col. 26, lines 13-31).

Regarding claim 10, Seazholtz et al. disclose in figure 1, a paging control system of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and 16), and includes a paging agent (col. 27, line 64) for managing paging signals (col. 27, lines 41-56), the paging control system comprising:

a terminal for transmitting previously a request for a communication system a terminal wishes to use (col. 9, lines 24-39), and terminal location information of the terminal from the terminal to the paging agent (col. 33, lines 54-64); registering means for registering the received request and the terminal location information in said paging agent (col. 33, lines 44-54);

selecting means in said paging agent for selecting an optimum communication system from among said plurality of communication systems in accordance with the registered request and the terminal location information in said registering means (col. 9, line 40-col. 10, line 14); and

communication control means (fig. 1, box 22) for causing said optimum communication system selected by said selecting means to transmit the paging signal to said terminal (col. 11, lines 45-60).

Regarding claim 11, Seazholtz et al. disclose a paging control method as recited in the rejection of claim 10, wherein said terminal transmits a connection request signal to said optimum communication system (col. 9, lines 55-56 and col. 9, lines 35-39).

Regarding claim 12, Seazholtz et al. disclose in figure 1, a paging control system of a communication system that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and 16), and includes a paging agent (col. 27, line 64) for managing paging signals (col. 27, lines 41-56), the paging control system comprising:

a terminal for transmitting previously request for a communication system a terminal wishes to use (col. 9, lines 24-39), and terminal location information of the terminal to the paging agent (col. 33, lines 44-64);

storing means (col. 18, lines 4-6) in said paging agent for registering the received request and the terminal location information (col. 17, line 64-col. 18, line 6);

selecting means (col. 18, lines 4-6) in said paging agent for selecting an optimum communication system from among the plurality of communication systems in accordance with the registered request and the terminal location information in said storing means (col. 17, line 64-col. 18, line 6); and

communication control means (col. 27, lines 62-67 and col. 27, lines 41-56) for transmitting a paging signal including a name of said optimum communication system (SIDs) selected by said selecting means (col. 18, lines 4-6 and col. 9, line 40-col. 10, line 14) from a given communication system predetermined from among said plurality of communication systems to said terminal (fig. 5 and col. 14, line 41-col. 15, line 61).

Regarding claim 13, Seazholtz et al. disclose a paging control method as recited in the rejection of claim 12, wherein said terminal transmits a connection request signal to said given communication system (col. 9, lines 55-56 and col. 9, lines 35-39), and waits for an information signal from said optimum communication system contained in said paging signal (col. 28, lines 6-32).

Regarding claim 14, Seazholtz et al. disclose a paging control system as claimed in any one of claims 10 and 12, wherein said selecting means uses one of a communication cost (fig. 5 and col. 34, lines 16-27), a transmission rate (very high bit transmission rate), a transmission quality (good error performance) and a combination of at least two of them (col. 26, lines 18-19 and col. 34, lines 16-27) as a selection index of said optimum communication system (col. 26, lines 13-31).

Regarding claim 15, Seazholtz et al. disclose a paging control system as claimed in any one of claims 10 and 12, wherein said selecting means (fig. 5, box 507 and col. 18, lines 4-6) carries out the selection of said optimum communication system (col. 9,

line 40-col. 10, line 14) in response to a query about the optimum communication system from said communication control means (col. 27, lines 62-67 and col. 27, lines 41-56).

Regarding claim 16, Seazholtz et al. disclose a recording medium (fig. 1, box 22 and col. 11, lines 45-60) which records a paging control program in a communication system (col. 11, lines 47-49) that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and 16), and includes a paging agent (col. 27, line 65) for managing paging signals (col. 41-56), said paging control program, which is used by a computer (22) for controlling said paging agent, causing said computer to:

receive from a terminal a request for a communication system said terminal wishes to use (col. 9, lines 24-39), and terminal location information of said terminal (col. 33, lines 54-64); to register the received request and the terminal location information (col. 33, lines 44-54);

to select an optimum communication system from among the plurality of communication systems in accordance with the registered request and the terminal location information (col. 17, lines 64-col. 18, line 6 and col. 9, line 40-col. 10, line 14); and

to cause said optimum communication system selected to transmit the paging signal to said terminal (col. 9, lines 29-56).

Regarding claim 17, Seazholtz et al. disclose a recording medium (fig. 1, box 22 and col. 11, lines 45-60) which records a paging control program in a communication system (col. 11, lines 47-49) that selectively provides one of communication services implemented by integrating a plurality of communication systems (fig. 1, boxes 14 and 16), and includes a paging agent (col. 27, line 65) for managing paging signals (col. 41-56), said paging control program, which is used by a computer (22) for controlling said paging agent, causing said computer to:

receive from a terminal a request for a communication system said terminal wishes to use (col. 9, lines 24-39), and terminal location information of said terminal (col. 33, lines 54-64); register the received request and the terminal location information (col. 33, lines 44-54);

select an optimum communication system from among said plurality of communication systems in accordance with the registered request and the terminal location information (col. 17, lines 64-col. 18, line 6 and col. 9, line 40-col. 10, line 14); and

cause a given communication system, which is predetermined from among said plurality of communication systems communication control means for carrying out transmission to said terminal (col. 9, lines 29-56), to transmit to said terminal a paging signal (fig. 9 and col. 28, lines 3-67) including a name of said optimum communication system selected (SID).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cashman in view of Seazholtz et al.

Regarding claims 7 and 14, Cashman discloses a paging control system as recited in the rejection of claims 1 and 8, respectively. But, Cashman does not particularly show the system wherein said selecting step being used one of a communication cost, a transmission rate, a transmission quality and a combination of at least two of them as a selection index of said optimum communication system.

However in analogous art, Seazholtz et al. disclose a method wherein said selecting step being used one of a communication cost (fig. 5 and col. 34, lines 16-27), a transmission rate (very high bit transmission rate), a transmission quality (good error performance) and a combination of at least two of them (col. 26, lines 18-19 and col. 34, lines 16-27) as a selection index of said optimum communication system (col. 26, lines 13-31). Since, Cashman and Seazholtz et al. are related to the method for paging control; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Cashman by specifically having selecting step being used one of a communication cost, a transmission rate, a transmission quality and a combination of at least two of them as a selection index of

said optimum communication system as taught by Seazholtz et al. for purpose of improving the cost, quality and reliability of the communication system.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Madour et al. (US-6,108,518) disclose a method of controlling paging.
- b) Kolev (US-5,946,619) discloses a method for improved paging control.
- c) Anderson et al. (US-6,148,198) disclose a method for selecting a service provider.
- d) Vialen et al. (US-2002/0019241) disclose a paging control method.
- e) Kallin et al. (US-6,058,308) disclose a paging control method.
- f) Vo (US-5,873,042) discloses a method of paging.
- g) Fomukong et al. (US-6,560,461) disclose a paging system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Urban F Edward can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, Huy Q

AU: 2685

Date : Jun. 25, 2004


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